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The geographical Feature and Problems of Chitral

- a short introduction -

by

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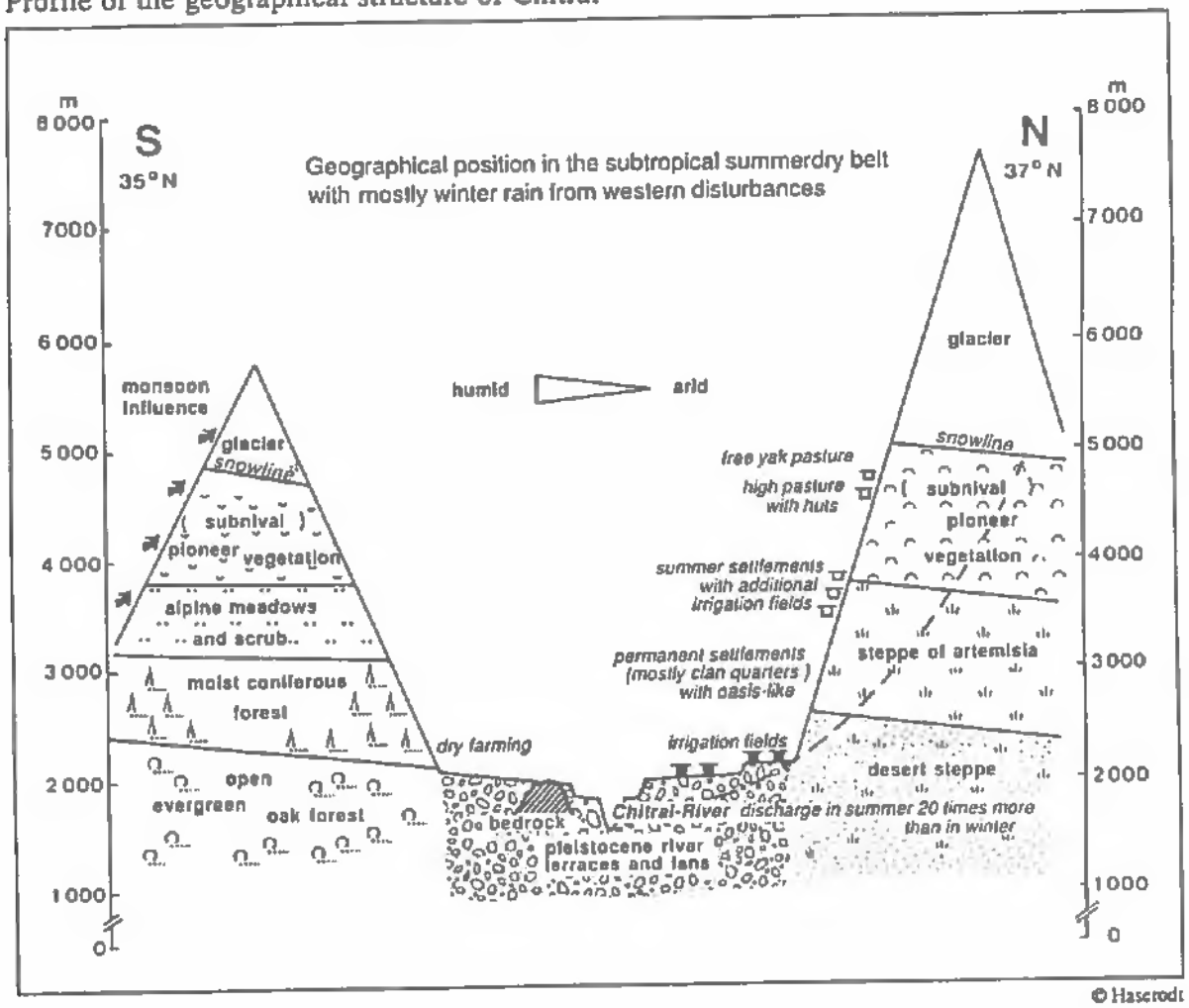
The geographical structures, change and problems of the high mountain area of Chitral "between glaciers and desert" are remarkable. In this context the historical background and the physical and human geographical situation of this area we have to see together.

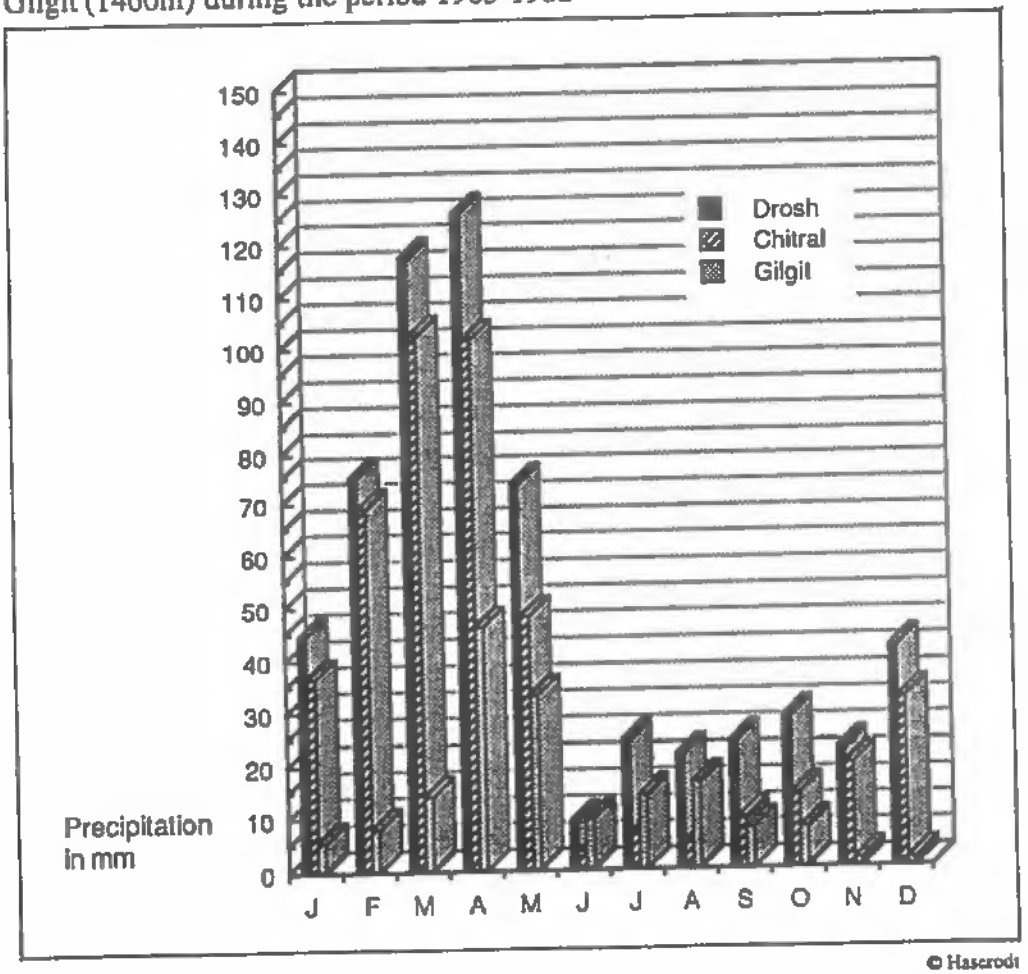
Profile of the geographical structure of Chitral



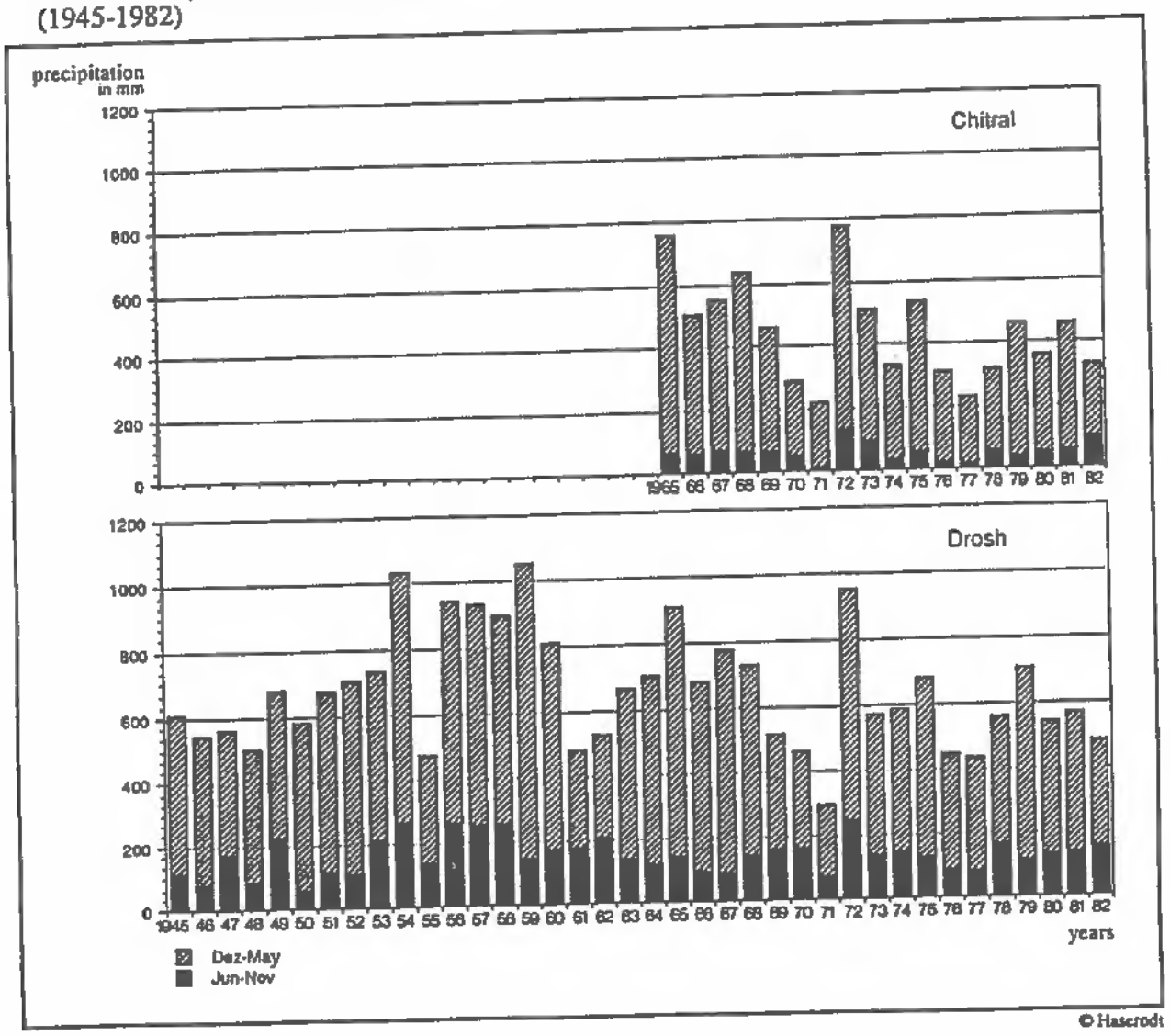
Chitral, a former semiindependent territory in the further past and also in the British and early Pakistan time, is situated on the north western border of Pakistan to the neighboures Afghanistan (see map). During the past the territory of Chitral also was influenced by invasions and immigrations from the north. The roots of the last house of the Chitrali ruler ("mehtar" like a king) can be followed back to the familiy of the Timurids. Since the nineties of the last century Chitral was indirectly ruled by the British up to 1947 and by Pakistan up to the beginning of the seventies. At that time the former power of the local rulers and the former semiindependence of the Chitral State were abolished and afterwards Chitral has been integrated gradually into the political system of the State of Pakistan with the status of a district of the North West Frontier Province (N.W.F.P.).

The rich natural features of Chitral are generally marked by the high mountain face. Chitral is a part of the summerdry and in wintertimes of the rainfall-effected subtropical zone. The mean temperature at Chitral Town rises from 4°C (January) to 28°C (July). The precipitation (registrated only at 2 valley stations) decreases from SW to NE (e.g. mean yearly amount at Drosh more than 600 mm, at Chitral Town about 450 mm); but in the high glacier region the precipitation persumably is about 4 times as much. Sometimes also in summer heavy rainfall occurs, partly influenced by the superposition of a marginal monsoon influence (in the S) and influences of western disturbances in the heights. There is also a considerable annual rainfall variability from year to year. The valleys are very dry in summer and autumn and also influenced by local wind systems.

Monthly mean precipitation at Drosh (1465m), Chitral Town (1480m) and Gilgit (1460m) during the period 1965-1982

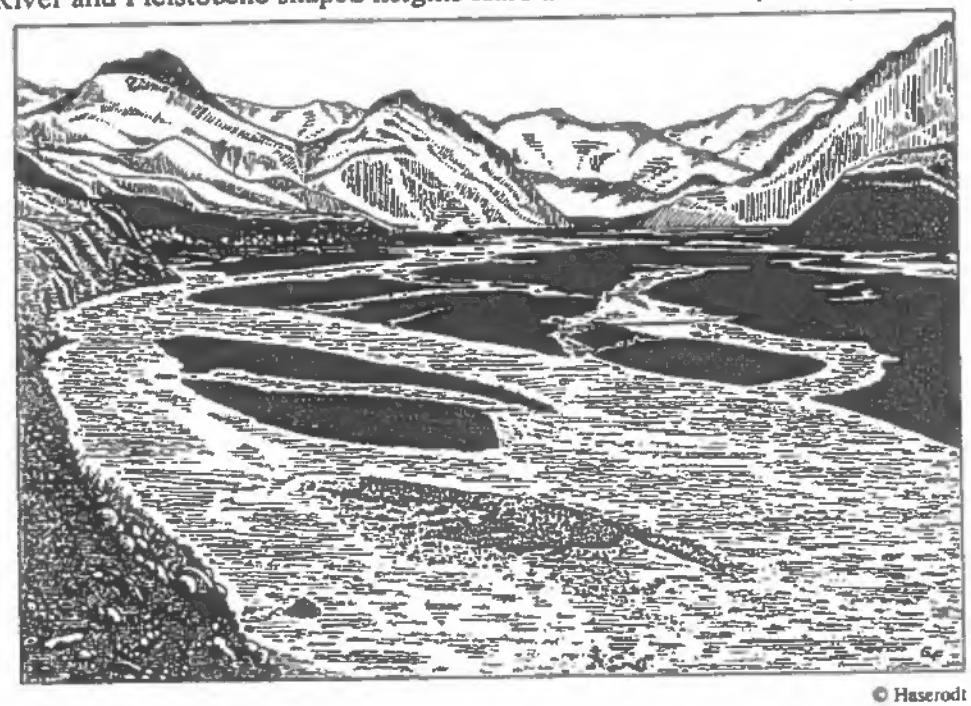


Variation of yearly precipitation amount at Chitral Town (1965-1982) and at Drosh (1945-1982)



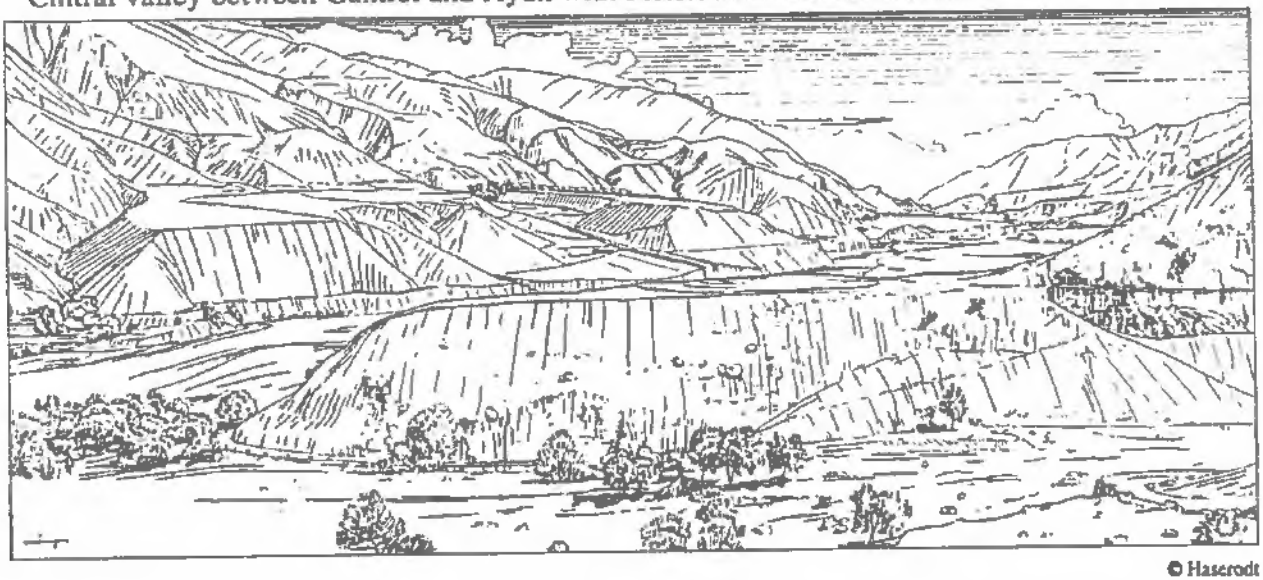
Vegetation steps depending on climate and the height vary because of exposition, too. In the S, vegetation reaches from the semidesert bottoms of the valleys with artemisia steppe and evergreen oak forests on the lower slopes to coniferous forests (mainly *Cedrus* and *Pinus*) and, with a timberline in about 3300 m, to the heights of subalpine scrubs and alpine meadows. On the other hand in the treeless NW, N, NE and E of Chitral the semideserted features reach from the bottom of the valleys up to the heights, where also some localities like alpine meadows with high pastures are found (see down). Near to the snowline (S: about 4800 m, N: about 5000 to 5100 m) the pionier vegetation grows which covers a vast area up to the glaciers.

Mastuj-River and Pleistocene shaped heights Karo Lasht near Buni (1940m)



The traditional settlements in majority are situated at the bottom of the valleys, often on old fluvioglacial terraces or alluvial fans and there often scattered as separate clan quarters with separate small mosques. The traditional Chitrali houses are well constructed as one-roomhouses. In the southern parts of Chitral as well as in the area of Kafiristan in the SW a lot of timber is used for the construction of houses. There the houses are built close together, at some places like fortified villages. A special type of buildings in some areas of Chitral are the old forts of the former rulers and their relatives.

Chitral valley between Gahiret and Ayun with Pleistocene terraces and fans



The agriculture of Chitral is slowly changing from tradition to some modernisation. Because of natural limitations (see above) only about 1,2% of the total geographical area of Chitral is cultivated and can be used for a agricultural production. Depends on the amount of precipitation only a small percentage of that area is cultivated by dry farming. The great majority (95%) depends on irrigation by a network of small channels. But only 40% ot the area is cropped more than once a year. Not the main river on the bottom of the valley with his maximum flow in summer (see above) but its tributaries are the main sources of irrigation. These tributaries frequently suffer from a shortage of water in summer. In order to extend the irrigation area into the dry land required in addition to the large number of small traditional local irrigation channels some new irrigation schemes by the Government which were constructed on the steep slopes during the seventies and the eighties.

Settled areas and fields on Pleistocene river terraces and old fans

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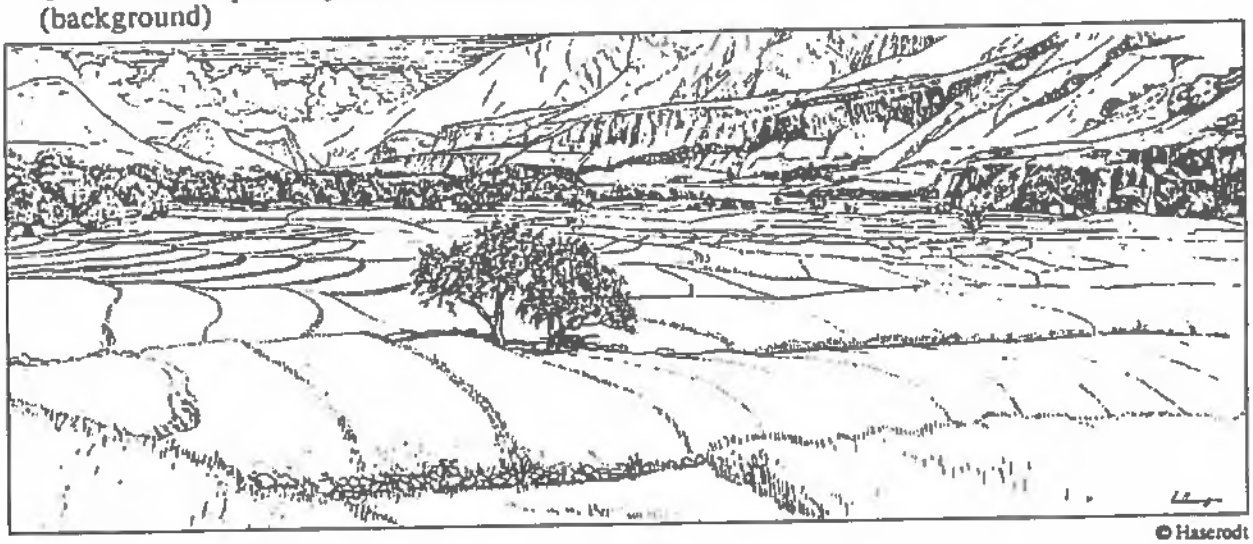
A noticeable change in crop production has taken place. The cultivation of barley and millet decreased while the cultivation of maize and rice increased. Rice cultivation has been extended into the higher parts of the main valleys up to the heights of 2500 m (Yarkhun valley). As well today the main cereal crop is wheat, but now with new and more productive varieties which were introduced in the

Chitral landscape at Ayun (1420m) with rice cultivation (in front) and Pleistocene terraces (background)



The most of Chitrali still are using traditional implements for its agriculture. Only a few tractors and threshers are working in the whole of Chitral. Especially in the N and NE of Chitral a high rate of lendtenure still exists and partly causes a continuation of the landlord systems. In some parts of Chitral governmental agriculture-assistants are working. In the eighties the successful Ismailia based *Aga Khan Rural Support Programme* (AKRSP) was established additionally.

In Chitral traditionally livestock is very important for the Chitrali people because of the natural limitation of possibilities of agricultural production. The increasing livestock is grated into the seasonal different used high mountain steps and also different kinds of seasonal used settlements huts and pastures have been developed due to the ethnic and socioeconomic diversity. Especially the transhumant Gujurs in the S and SE, also the Kho and some minorities in the NW, N and NE of Chitral, keep large and increasing herds of cattle, goats and sheeps. Seasonally the herds of grazing animals endanger the ecological balance in the highpastures like alpine meadows, in the area of seasonal passing and partly as well in the valleys. Additionally to the herds watched by shepherds higher above free-grazing Yaks are characteristic for some places in the N and NE.

Compared with the neighbouring more developed region of Gilgit, in Chitral the non-agrarian sources of income still are less. Beside the dealers and shopkeepers in the - compared to the sixties - recognizably extended and remarkably more diversified bazaars (especially Chitral Town and Drosh) but also inside the villages there are jobs with traditional manual workers. In the bazaars the growing influence of Pathans as dealers and traders can be recognized. On the other hand the jobs in the service sectors does not comprise office jobs only, e.g. roadworkers and so on. For example also the police and the Chitral Scouts are important for jobs. During the eighties the area of Chitral has got special problems by thousands of Afghan refugees. Also the main bazaars at Chitral Town and Drosh have changed their faces. More and more goods from downside were have been imported too. The export of manpower as a seasonal and also as a longtime migration of Chitral workers has increased (see above).

In the public sector of education the progress was remarkable during the seventies. In 1981 the Chitral District had over all more than 200 schools with Urdu as the teaching medium and on Government degree college. But literacy ration of 13% (male 22%, female only 2%) in the whole Chitral was 2 1/2 time lower than in Gligit. Problems exist also in public health. The increased network of dispensaries suffer from short-ages in medicin and only 3 small hospitals and 3 doctors work for more than 250 000 inhabitants of Chitral. In 1981 only 2% of the Chitrali households had drinking water by pipes, the other by open channels, only 4% (Gilgit 20%!) had electricity by small hydroelectric stations. But the progress is going on; e.g. in the eighties Chitral got the facilities to receive TV from Peshawar.

Because of its high mountain features Chitral offers a rich potential for tourism. But compared with Gilgit and Hunza the real tourism inside Chitral is quite less developed. This fact is also influenced by difficulties in road connections. The domestic and foreign tourists mainly come to Chitral by air. But the flights are subjected to weather conditions. The majority of the tourists make the popular trip into the ethnologically interesting valleys of Kafiristan. The tourists also appriciate the special local polo matches, some will book "jeep safaris", few are trekkers. Still the capacity of the hotels, resthouses and local inns is limited, especially outside of Chitral Town. The Chitrali themselves have participated in tourism only to a minor degree until now, e.g. because of "downsider" - influence on tour - organisation.

However, change and development of the remote and backward region of Chitral have been significant within the last twenty years and proceeded. Still the main problems of Chitral are within overpopulation, food and firewood shortage and a generally permanent unemployment. Development of Chitral is also influenced by repercussions by remigrated or temporary remigrated inhabitants of Chitral itself. Last but not least on the socioeconomical and political sector the integration of Chitral into the other part of Pakistan increased remarkable.

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